

Northwest

California Coast

Gulf Coast

Mid-Atlantic/Southeast

Northeast



Estuaries are places where the land meets the sea and where freshwater rivers mix with salty oceans. These ecosystems, at the junction between terrestrial and marine environments, are among the world's most biologically diverse and productive. Estuaries are one of our most valuable natural resources and create more food per acre than the richest farmland.

Estuaries teem with life, providing essential habitat for eighty percent of the world's fish and shellfish species. Forty-five percent of endangered and threatened species in the United States live in estuaries.

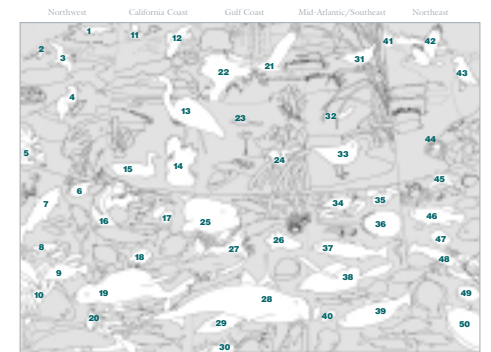
This poster shows some of the geographic and biological diversity in U.S. estuaries, from the Pacific Northwest to the Northeast Coast. Estuaries are scenes of transition in ways other than those depicted in this illustration. More than half the Nation's population lives within 50 miles of the coast, and hundreds of thousands of new residents move into coastal areas each year. This growing population places increasing stress on coastal environments. Excess nutrients, pathogens, toxic chemicals, habitat loss and degradation, introduced species, alterations to natural water flow, and overfishing all threaten our Nation's estuaries.

The National Estuary Program (NEP) is working to restore and protect these sensitive ecosystems. The NEP provides funding and technical assistance to citizens, governments, businesses, researchers, and organizations in local communities that take responsibility for creating and implementing comprehensive conservation and management plans for their own estuaries. The objective of each local NEP is to address the whole range of environmental problems facing an estuary while balancing the needs of the community. Together, these estuary programs are working to safeguard the health of some of our Nation's most important natural resources and transferring the lessons they learn to other watersheds.

Visit the United States Environmental Protection Agency's Web site at <www.epa.gov/owow/estuaries> for additional information on our Nation's estuaries, including how you can help protect these national treasures and links to related organizations. To order additional copies of this poster, call the National Service Center for Environmental Publications at 800 490-9198, and reference document number EPAB42-H-99-001.

For More Information

U.S. Environmental Protection Agency
Office of Water, Coastal Management Branch
1200 Pennsylvania Avenue
Ariel Rios Building (4504F)
Washington, DC 20004
Web site: www.epa.gov/owow/estuaries



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|--|--|--|--|---|
| 1. Marbled Murrelet
<i>Brachyramphus
marmoratus</i> | 11. Brown Pelican
<i>Pelecanus occidentalis</i> | 21. Whooping Crane
<i>Grus americana</i> | 31. Marsh Wren
<i>Cistothorus palustris</i> | 41. Herring Gull
<i>Larus argentatus</i> |
| 2. Orca
<i>Orcinus orca</i> | 12. Western Gull
<i>Larus occidentalis</i> | 22. Red Mangrove
<i>Rhizophora mangle</i> | 32. Diamondback Terrapin
<i>Malaclemys terrapin</i> | 42. Bald Eagle
<i>Haliaeetus leucocephalus</i> |
| 3. Caspian Tern
<i>Sterna caspia</i> | 13. Great Blue Heron
<i>Ardea herodias</i> | 23. Alligator
<i>Alligator mississippiensis</i> | 33. Piping Plover
<i>Charadrius melodus</i> | 43. Atlantic Puffin
<i>Fratercula arctica</i> |
| 4. River Otter
<i>Lutra canadensis</i> | 14. Pickleweed
<i>Salicornia virginica</i> | 24. Water Moccasin
<i>Apalone nuchalis</i> | 34. Blue Crab
<i>Callinectes sapidus</i> | 44. Green Crab
<i>Carcinus maenas</i> |
| 5. Blue Mussel
<i>Mytilus edulis</i> | 15. Black Brant
<i>Branta bernicla</i> | 25. Manatee
<i>Trichechus manatus</i> | 35. Eastern Oyster
<i>Crassostrea virginica</i> | 45. Sea Star
<i>Asterias forbesi</i> |
| 6. Anemone
<i>Anthopleura xanthogramma</i> | 16. Eel Grass
<i>Zostera marina</i> | 26. Queen Conch
<i>Strombus gigas</i> | 36. Horseshoe Crab
<i>Limulus polydora</i> | 46. Tautog
<i>Tautoga onitis</i> |
| 7. Sockeye Salmon
<i>Oncorhynchus nerka</i> | 17. Native Pacific Oyster
<i>Ostrea lucida</i> | 27. Turfgrass
<i>Phragmites australis</i> | 37. Bluefish
<i>Morone saxatilis</i> | 47. Quahog
<i>Meretricaria meretricaria</i> |
| 8. Dungeness Crab
<i>Cancer magister</i> | 18. Garibaldi
<i>Paracheilichthys rubundus</i> | 28. Atlantic Bottlenose Dolphin
<i>Tursiops truncatus</i> | 38. Loggerhead Turtle
<i>Caretta caretta</i> | 48. Lobster
<i>Homarus americanus</i> |
| 9. China Rockfish
<i>Sebastes chinensis</i> | 19. California Sea Lion
<i>Zalophus californianus</i> | 29. Great Barracuda
<i>Sphyrna barracuda</i> | 39. Striped Bass
<i>Morone saxatilis</i> | 49. Bay Scallops
<i>Pecten irradians</i> |
| 10. Bull Kelp
<i>Nereocystis luetkeana</i> | 20. Giant Kelp
<i>Macrocystis pyrifera</i> | 30. Staghorn Coral
<i>Acropora cervicornis</i> | 40. Comb Jellyfish
<i>Mastigias yulei</i> | 50. Winter Flounder
<i>Pleuronectes americanus</i> |

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ESTUARIES: SCENES OF TRANSITION

